Title (en)

METHOD FOR MACHINING OUTER CIRCUMFERENCE OF METAL END CROSS-SECTION AND METHOD FOR JOINING METAL PART OBTAINED BY SAID MACHINING METHOD WITH ANOTHER MEMBER

Title (de)

VERFAHREN ZUR BEARBEITUNG DES ÄUSSEREN UMFANGS EINES METALLENDQUERSCHNITTS UND VERFAHREN ZUM VERBINDEN VON MIT DIESEM BEARBEITUNGSVERFAHREN ERHALTENEN METALLTEILEN MIT EINEM ANDEREN ELEMENT

Title (fr)

PROCÉDÉ D'USINAGE DE CIRCONFÉRENCE EXTÉRIEURE DE SECTION TRANSVERSALE D'EXTRÉMITÉ MÉTALLIQUE, ET PROCÉDÉ D'ASSEMBLAGE DE PARTIE MÉTALLIQUE OBTENUE AU MOYEN DU PROCÉDÉ D'USINAGE AVEC UN AUTRE ÉLÉMENT

Publication

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Application

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Abstract (en)

[origin: EP3235589A1] Provided are a method for machining the outer circumference of a metal end cross-section , the method being capable of easily forming at least any of a deep groove, a deep recess, and a flange which are smooth and uniform in the longitudinal direction of a metal rod or metal pipe in the periphery of the cross-section of any of the end part of the metal rod or metal pipe, the drawn end part of the metal rod or metal pipe, and the hub hole forming part of the metal pipe; and a method for joining a metal component obtained by the machining method with another member. The machining method of the present invention is characterized in that: splitting is advanced by successively repeating press forming operation multiple times by using a slitting punch, in which a tip part has a sharp cutting edge, and the cutting edge is formed so as to have a shape equal to or partly equal to the outer shape of the cross section of a metal end part and so as to have a diameter smaller than the outer diameter of the cross section of the splitting object; and in order to control the depth of metal cracking cleft created with each press forming operation, a pressing die for pinching the outside of a metal rod or at least a pressing die of one side of pressing dies for pinching the inside and the outside of a metal pipe is disposed while its position is moved according to the distance of a split portion.

IPC 8 full level

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